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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/057,817

01/22/2002

Charles F. Marino

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23550 7590 02/14/2007
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EXAMINER

CHOW, JEFFREY J

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

02/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/057,817	Applicant(s) MARINO, CHARLES F.	
	Examiner Jeffrey J. Chow	Art Unit 2628	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.


ULKA CHAUHAN

ADVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues Blomgren (US 5,935,198) does not teach bit slicing each multiplier according to the pixel format (pages 7 and 8). Blomgren discloses taking a full-size multiplier, such as a 32-bit multiplier, and dividing into smaller sections which can operate independently for 8-bit multipliers (column 13, lines 28 - 37). Blomgren discloses each pixel has three color components: Red, Green, Blue, and a fourth component: alpha (column 13, lines 18 and 19) and where interpolation must be performed on all three color components and often on the alpha components (column 13, lines 19 - 21) and performing four interpolations in parallel significantly improves throughput (column 13, lines 21 - 27) and therefore all four smaller pixel components can be interpolated simultaneously in a larger multiplier (column 13, lines 35 - 37). Blomgren does teach bit slicing each multiplier according to the pixel format.

Blomgren recites:

"FIG. 9 is a diagram of a parallel graphics interpolator. Each pixel has three color components: Red, Green, Blue, and a fourth component: alpha (A). Interpolation must be performed on all three color components and often on the alpha component as well. It is possible to use a single multiplier to perform the four interpolations in series, one interpolation after another, but this is somewhat slow. Four interpolators/multipliers as described earlier may be included on a processor so that four interpolations can be performed in parallel, at the same time. Parallel interpolation significantly improves throughput" (column 13, lines 17 - 27).

"Modern microprocessors operate on 32 or 64 bits of data, yet the color components are typically 8 or 16 bits in size. A full 32- or 64-bit multiplier may be needed for the general-purpose processor, but only 8- or 16-bit multipliers are needed for graphics interpolations. The full-size multiplier may be divided into smaller sections which can operate independently for 8-bit multipliers, or together as one large multiplier for 32-bit multipliers. Thus all four smaller pixel components can be interpolated simultaneously in a larger multiplier. Intel Corp. of Santa Clara, Calif. has announced microprocessors using "MMX", which allows for parallel operation. For example, four independent 16-bit additions can be performed simultaneously, in parallel, in a 64-bit adder. The 64-bit adder operates as 4 independent 16-bit sections in MMX mode" (column 13, line 28 - 42).

Blomgren realizes that four interpolations on the color components, RGBA, are needed. Blomgren realizes that 8-bit multipliers are needed for graphics interpolations. Blomgren teaches dividing a large multiplier, 32-bit multiplier, into smaller sections that can operate as independent 8-bit multipliers as the color components are usually 8-bit or 16-bit. Blomgren realizes that all four smaller pixel components can be interpolated simultaneously in a larger multiplier.

Regarding the filing date of the present application, the filing data has been corrected and corrected filing receipt has been mailed. .